+135-3858-6433 (GuangDong)
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LEXAN™ Resin HF3454

Asia Pacific: COMMERCIAL

GF filled, Non-brominated/non-chlorinated FR PC. High flow.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	610	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	400	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	6.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	40700	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1060	kgf/cm²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1040	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	36700	kgf/cm²	ASTM D 790
Tensile Stress, yield, 5 mm/min	60	MPa	ISO 527
Tensile Stress, break, 5 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	6.8	%	ISO 527
Tensile Modulus, 1 mm/min	4000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	110	MPa	ISO 178
Flexural Stress, break, 2 mm/min	108	MPa	ISO 178
Flexural Modulus, 2 mm/min	4000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	71	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	162	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*3 +23°C	6	kJ/m²	ISO 180/1A

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
IMPACT			
Izod Impact, notched 80*10*3 -30°C	5	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	57	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	4	kJ/m²	ISO 180/1A
Charpy Impact, notched, 23°C	4	kJ/m²	ISO 179/2C
THERMAL			
Vicat Softening Temp, Rate B/50	121	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	112	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	113	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.7E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.1E-05	1/°C	ASTM E 831
CTE, 23°C to 80°C, flow	4.9E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.2E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	124	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	113	°C	ISO 75/Af
Relative Temp Index, Elec	80	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	80	°C	UL 746B
PHYSICAL			
Specific Gravity	1.26	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.2 - 0.4	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.3 - 0.5	%	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	24	g/10 min	ASTM D 1238
Melt Volume Rate, MVR at 300°C/1.2 kg	22	cm³/10 min	ASTM D 1238
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1	mm	UL 94

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	24	hrs
Melt Temperature	270 - 310	°C
Nozzle Temperature	270 - 300	°C
Front - Zone 3 Temperature	270 - 300	°C
Middle - Zone 2 Temperature	270 - 290	°C
Rear - Zone 1 Temperature	260 - 275	°C
Mold Temperature	50 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	35 - 75	rpm
Shot to Cylinder Size	40 - 60	%
Vent Depth	0.038 - 0.076	mm